IN THE CLAIMS:

1. (Currently Amended) A method for obtaining diagnostic information relating to a patient having an implanted transducer, comprising:

vibrating an ossicular bone of the patient using an input provided to the ossicular bone over a biological conduction path, wherein the biological conduction path consists of biological components of the patient, and wherein said input is not provided by said implanted transducer;

sensing in the implanted transducer an initial movement of the ossicular bone caused by the input provided over the biological conduction path;

obtaining an electrical signal output from the implanted transducer generated in response to sensing, in the implanted transducer, the initial movement of the ossicular bone; and,

utilizing the electrical signal output to determine the diagnostic information relating to the patient.

2. (Original) A method as recited in Claim 1, wherein the vibrating and sensing steps comprise:

vibrating the ossicular bone during a first time interval and sensing the initial movement during a second time interval, wherein the first and second time interval at least partially overlap.

3. (Original) A method as recited in Claim 1, wherein the vibrating and sensing steps comprise:

vibrating the ossicular bone and sensing the initial movement substantially simultaneously.

4. (Original) A method as recited in Claim 1, wherein the utilizing step comprises:

utilizing the electrical signal output to determine fitting parameter diagnostic information relating to at least one fitting parameter for the implanted transducer.

5. (Original) A method as recited in Claim 4, wherein the at least one fitting parameter includes an interface between the implanted transducer and the ossicular bone and the utilizing step comprises:

assessing the interface between the ossicular bone and the implanted transducer.

6. (Original) A method as recited in Claim 5, wherein the assessing step comprises:

determining if the implanted transducer is underloaded relative to the ossicular bone.

7. (Original) A method as recited in Claim 5, wherein the assessing step comprises:

determining if the implanted transducer is overloaded relative to the ossicular bone.

8. (Original) A method as recited in Claim 5, wherein the assessing step comprises:

determining if a desired interface exists between the implanted transducer and the ossicular bone.

9. (Original) A method as recited in Claim 5, further comprising:

repositioning the transducer relative to the ossicular bone in response to the assessing step.

10. (Currently Amended) A method as recited in Claim 1, wherein the utilizing step comprises:

utilizing the electrical signal output to determine ~~implanted transducer~~ diagnostic information ~~relating~~that relates to the operation of the implanted transducer.

11. (Original) A method as recited in Claim 10, wherein the implanted transducer diagnostic information includes at least one operating parameter of the implanted transducer.

12. (Original) A method as recited in Claim 11, wherein the at least one operating parameter includes a transducer performance parameter.

13. (Original) A method as recited in Claim 1, wherein the utilizing step comprises:

utilizing the electrical signal output to determine auditory system diagnostic information relating to the patient's auditory system.

14. (Original) A method as recited in Claim 13, wherein the auditory system diagnostic information includes a mobility of the patient's ossicular chain.

15. (Original) A method as recited in Claim 14, the method comprising:

using the mobility of the patient's ossicular chain to diagnose pathologies of the middle ear.

16. (Original) A method as recited in Claim 15, wherein the pathologies are selected from the group of pathologies comprising:

bony growths, arthritic conditions, and otitis media.

17. (Original) A method as recited in Claim 1, wherein the vibrating step includes:

introducing an acoustic signal into an ear canal of the patient.

18. (Original) A method as recited in Claim 1, wherein the vibrating step comprises:

vibrating at least a portion of a skull of the patient.

19. (Original) A method as recited in Claim 1, wherein the vibrating step comprises:

mechanically stimulating the tympanic membrane of the patient.

20. (Original) A method as recited in Claim 1, wherein the electrical signal output is generated in response to movement of an actuator of the implanted transducer by the ossicular bone.

21. (Original) A method as recited in Claim 20, wherein the sensing step comprises:

transducing the movement of the actuator into the electrical signal output.

22. (Original) A method as recited in Claim 1, wherein the utilizing step comprises:

comparing the electrical signal output with a predetermined electrical signal output to generate the diagnostic information.

23. (Original) A method as recited in Claim 1, wherein the utilizing step comprises:

comparing the electrical signal output with a predetermined range of electrical signal outputs to generate the diagnostic information.

24. (Original) A method as recited in Claim 1, wherein the utilizing step comprises:

calculating a ratio between the input and the electrical signal output; and

comparing the ratio to a predetermined ratio to generate the diagnostic information.

25. (Original) A method as recited in Claim 1, wherein the utilizing step comprises:

obtaining at least one signal value from the electrical signal output; and

comparing the at least one signal value with a corresponding predetermined value to obtain comparison data, wherein the comparison data is indicative of the diagnostic information..

26. (Original) A method as recited in Claim 25, wherein the at least one value corresponds with a magnitude component of the electrical signal output.

27. (Original) A method as recited in Claim 26, wherein the input comprises at least one component of a predetermined frequency, and wherein the magnitude component of the electrical signal output is obtained in corresponding relation to the predetermined frequency of the input component.

28. (Original) A method as recited in Claim 25, wherein the at least one value corresponds with a flow component of the electrical signal output.

29. (Original) A method as recited in Claim 1, further comprising:

repeating the vibrating, sensing, obtaining, and utilizing steps in connection with each of a plurality of patient assessments conducted as spaced timed intervals to obtain a corresponding plurality of comparison data; and

utilizing the plurality of comparison data to generate the diagnostic information as a function of time.

30. (New) A method for obtaining diagnostic information relating to a patient having an implanted transducer, comprising:

vibrating an ossicular bone of the patient using an input provided to the ossicular bone over a biological conduction path, wherein the biological conduction path consists of biological components of the patient, wherein said input is not provided by said implanted transducer;

sensing in the implanted transducer an initial movement of the ossicular bone caused by the input provided over the biological conduction path;

obtaining an electrical signal output from the implanted transducer generated in response to sensing, in the implanted transducer, the initial movement of the ossicular bone; and,

utilizing the electrical signal output to determine diagnostic information that relates to the operation of the implanted transducer.

31. (New) A method as recited in Claim 30, wherein the diagnostic information includes at least one operating parameter of the implanted transducer.

32. (New) A method as recited in Claim 31, wherein the at least one operating parameter includes a transducer performance parameter.

33.(New) A method for obtaining diagnostic information relating to a patient having an implanted transducer, comprising:

vibrating an ossicular bone of the patient using an input provided to the ossicular bone over a biological conduction path, wherein the biological conduction path consists of biological components of the patient, wherein said input is not provided by said implanted transducer;

sensing in the implanted transducer an initial movement of the ossicular bone caused by the input provided over the biological conduction path;

obtaining an electrical signal output from the implanted transducer generated in response to sensing, in the implanted transducer, the initial movement of the ossicular bone; and,

utilizing the electrical signal output to determine auditory system diagnostic information relating to the patient's auditory system, wherein the auditory system diagnostic information includes a mobility of the patient's ossicular chain.

34. (New) A method as recited in Claim 33, the method comprising:

using the mobility of the patient's ossicular chain to diagnose pathologies of the middle ear.

35. (New) A method as recited in Claim 34, wherein the pathologies are selected from the group of pathologies comprising:

bony growths, arthritic conditions, and otitis media.

36. (New) A method for obtaining diagnostic information relating to a patient having an implanted transducer, comprising:

vibrating an ossicular bone of the patient using an input provided to the ossicular bone over a biological conduction path, wherein the biological conduction path consists of biological components of the patient;

sensing in the implanted transducer an initial movement of the ossicular bone caused by the input provided over the biological conduction path;

obtaining an electrical signal output from the implanted transducer generated in response to sensing, in the implanted transducer, the initial movement of the ossicular bone; and,

utilizing the electrical signal output to determine diagnostic information relating to the patient, wherein said utilizing step comprises comparing the electrical signal output with a predetermined electrical signal output to generate the diagnostic information.

37. (New) A method for obtaining diagnostic information relating to a patient having an implanted transducer, comprising:

vibrating an ossicular bone of the patient using an input provided to the ossicular bone over a biological conduction path, wherein the biological conduction path consists of biological components of the patient;

sensing in the implanted transducer an initial movement of the ossicular bone caused by the input provided over the biological conduction path;

obtaining an electrical signal output from the implanted transducer generated in response

to sensing, in the implanted transducer, the initial movement of the ossicular bone; and,

utilizing the electrical signal output to determine diagnostic information relating to the patient, wherein said utilizing step comprises comparing the electrical signal output with a predetermined range of electrical signal outputs to generate the diagnostic information.

38. (New) A method for obtaining diagnostic information relating to a patient having an implanted transducer, comprising:

vibrating an ossicular bone of the patient using an input provided to the ossicular bone over a biological conduction path, wherein the biological conduction path consists of biological components of the patient;

sensing in the implanted transducer an initial movement of the ossicular bone caused by the input provided over the biological conduction path;

obtaining an electrical signal output from the implanted transducer generated in response to sensing, in the implanted transducer, the initial movement of the ossicular bone; and,

utilizing the electrical signal output to determine diagnostic information relating to the patient, wherein said utilizing step further comprises:

calculating a ratio between the input and the electrical signal output; and

comparing the ratio to a predetermined ratio to generate the diagnostic information.

39. (New) A method for obtaining diagnostic information relating to a patient having an implanted transducer, comprising:

vibrating an ossicular bone of the patient using an input provided to the ossicular bone over a biological conduction path, wherein the biological conduction path consists of biological components of the patient;

sensing in the implanted transducer an initial movement of the ossicular bone caused by the input provided over the biological conduction path;

obtaining an electrical signal output from the implanted transducer generated in response to sensing, in the implanted transducer, the initial movement of the ossicular bone; and,

utilizing the electrical signal output to determine diagnostic information relating to the

patient, wherein said utilizing step further comprises:

obtaining at least one signal value from the electrical signal output; and

comparing the at least one signal value with a corresponding predetermined value to obtain comparison data, wherein the comparison data is indicative of the diagnostic information.

40. (New) A method as recited in Claim 39, wherein the at least one signal value corresponds with a magnitude component of the electrical signal output.

41. (New) A method as recited in Claim 40, wherein the input comprises at least one component of a predetermined frequency, and wherein the magnitude component of the electrical signal output is obtained in corresponding relation to the predetermined frequency of the input component.

42. (New) A method as recited in Claim 39, wherein the at least one signal value corresponds with a flow component of the electrical signal output.

43. (New) A method for obtaining diagnostic information relating to a patient having an implanted transducer, comprising:

vibrating an ossicular bone of the patient using an input provided to the ossicular bone over a biological conduction path, wherein the biological conduction path consists of biological components of the patient;

sensing in the implanted transducer an initial movement of the ossicular bone caused by the input provided over the biological conduction path;

obtaining an electrical signal output from the implanted transducer generated in response to sensing, in the implanted transducer, the initial movement of the ossicular bone; and,

utilizing the electrical signal output to determine diagnostic information relating to the patient, wherein said utilizing step further comprises:

repeating the vibrating, sensing, obtaining, and utilizing steps in connection with each of a plurality of patient assessments conducted as spaced timed intervals to obtain a

corresponding plurality of comparison data; and

utilizing the plurality of comparison data to generate the diagnostic information as a function of time.